

REMARKS

Concerning the indication in the office action summary that the action was final, this will confirm a voice mail message from examiner Brutus advising that the action was not intended to be final and that the indication in the office action summary was in error. Accordingly, it is understood that the office action of January 20, 2010, is not a final action.

Claims 1-10 are pending in the present application. The Office Action and cited reference have been considered.

Claims 1-3 and 10 were rejected under 35 U.S.C. §102(b) as being anticipated by Adams (U.S. Pat 4,762,002).

Claims 4-9 were rejected under 35 U.S.C. §103(a) as being unpatentable over by Adams (U.S. Pat 4,762,002) in view of Mayol et al. (U.S. Pat 5,357,963).

These rejections are respectfully traversed.

*Claim rejections - 35 USC §102*

Claim 1 of the present application claims "an echographic probe with sector scanning comprising a tubular body at least partly housed in its front end, a transducer designed to emit an incident ultrasonic wave focused towards the structures to be examined and to receive ultrasonic waves generated by these structures under the effect of this incident wave, this transducer being rotatably mounted inside the probe around an

axis of rotation and being coupled with actuating means so as to be able to perform displacements at least partly in rotation relatively to the probe in order to obtain a sector scan of the structure to be examined, wherein the transducer comprise a piezoelectric assembly having power for focusing the emitted beams and adjacent to this assembly, a layer made in a material providing good transmission of ultrasonic waves, this layer having, opposite to said piezoelectric component, a convex axisymmetric outer surface, the generatrix of which has a curved shape and the director axis of which corresponds to the axis of rotation of the transducer so as to be able to come contact with the structure to be examined."

Adams, newly cited, discloses an echographic probe with sector scanning comprising a tubular body at least partly housed in its front end, a transducer designed to emit an incident ultrasonic wave focused towards the structures to be examined and to receive ultrasonic waves generated by these structures under the effect of this incident wave, this transducer being rotatably mounted inside the probe around an axis of rotation and being coupled with actuating means so as to be able to perform displacements at least partly in rotation relatively to the probe in order to obtain a sector scan of the structure to be examined, wherein the transducer comprise a piezoelectric assembly having power for focusing the emitted beams.

The Adams patent does not disclose the following features defined in claim 1 of the present application:

- a transducer comprising, adjacent to a piezoelectric assembly, a layer made in a material providing good transmission of ultrasonic waves,

- this layer having, opposite to said piezoelectric component, a convex axisymmetric outer surface, the generatrix of which has a curved shape,
- a director axis of the outer surface corresponding to the axis of rotation of the transducer, or
- this layer being able to come in contact with the structure to be examined.

On the contrary:

- The transducer 18 of Adams only comprises a piezoelectric element 18, and does not have any layer.
- This transducer 18 can't be in contact with the structure to be examined, as it is separated from this structure by a cavity 34 and a window 32,
- This window forms a planar end of probe, and thus is not convex,
- This probe end being substantially rectangular, is not axisymmetric.

Moreover, a probe according to Adams possesses all of the drawbacks of prior art devices described in the present application (see page 2 lines 15-27).

Therefore, Adams does not anticipate claim 1 and claims 2-10 should also be considered allowable in view of their dependency on claim 1.

Claim 2 further defines over the Adams patent disclosure in that Adams does not disclose a probe having an outer surface

layer with a generatrix of circular shape; in Adams there is no layer, and moreover, the probe end is planar.

Claim 3, further defines over the Adams patent disclosure in that the probe of Adams doesn't have an outer surface of a layer being spherical as there is no such layer, and moreover, the probe end is planar.

***Claim rejections – 35 USC §103***

Mayol et al disclose an echographic probe having a tubular body at least partly housing a transducer in its front end, this transducer being rotatably mounted inside the probe around an axis of rotation and being coupled with actuating means so as to be able to perform displacements at least partly in rotation relatively to the probe in order to obtain a sector scan of the structure to be examined, wherein the transducer comprise a piezoelectric assembly having power for focusing the emitted beams and adjacent to this assembly.

The Mayol et al patent, like Adams, doesn't disclose:

- a layer having, opposite to said piezoelectric component, a convex axisymmetric outer surface, the generatrix of which has a curved shape,
- a director axis of the outer surface corresponding to the axis of rotation of the transducer, or
- the layer being able to come in contact with the structure to be examined.

Moreover, the probe according to Mayol et al possesses all of the drawbacks of prior art devices described in the present application (see page 2 lines 15-27).

Furthermore, one skilled in the art familiar with the Adams and Mayol et al disclosures, would have to make numerous non-obvious choices, among which:

- the curvature of the tip of the probe,
- the number of transducers,
- an eventual axis of curvature of the tip, and,
- the position of this axis.

Moreover, of course, claims 4-9 depend on claim 1 and should be considered allowable along therewith.

In view of the above remarks, Applicant respectfully requests reconsideration and withdrawal of the outstanding rejections of record. Applicant submits that the application is in condition for allowance and an early notice to this effect is most earnestly solicited.

If the Examiner has any questions, he is invited to contact the undersigned.

Respectfully submitted,

BROWDY AND NEIMARK, P.L.L.C.  
Attorneys for Applicant

By /jmf/  
Jay M. Finkelstein  
Registration No. 21,082

JMF:smb  
Telephone No.: (202) 628-5197  
Facsimile No.: (202) 737-3528  
G:\BN\M\Out\Abascal1\Pto\2010-06-21 Response.doc